

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
)  
Kouji MATSUO, et al. ) **Prior** Group Art Unit: 2814  
)  
**Div. of** Application No.: 09/492,780, filed ) **Prior** Examiner: Rao, Shrinivas H.  
January 28, 2000 )  
)  
Filed: Herewith )  
)  
For: SEMICONDUCTOR DEVICE AND )  
METHOD OF MANUFACTURING )  
THE SAME )

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)**

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicants bring to the attention of the Examiner the documents listed on the attached PTO-1449. This Information Disclosure Statement is being filed concurrently with the above-referenced divisional application.

Copies of the listed documents were previously submitted by Applicants or cited by the Examiner in prior application No. 09/492,780, filed January 28, 2000, upon which Applicants rely for the benefits provided in 35 U.S.C. § 120. Applicants respectfully request that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached form.

Applicants note that Application No. 09/105,960, brought to the Examiner's attention in the IDS filed January 28, 2000 (in prior Application No. 09/492,780), has matured into U.S. Patent No. 6,346,438 and has been listed on the attached PTO-1449 under that number.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claim in the application and Applicants determine that the cited documents do not constitute "prior art" under United States law, Applicants reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such documents.

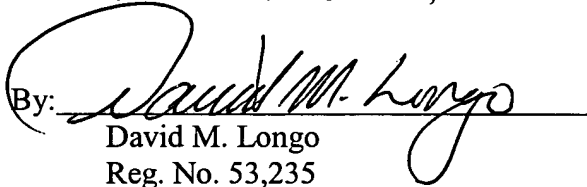
Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: April 2, 2004

By:   
David M. Longo  
Reg. No. 53,235

## INFORMATION DISCLOSURE CITATION

Atty. Docket No.	04329.2222-01	Div. of Appln. No.	09/492,780
Applicant	Kouji MATSUO, et al.		
Filing Date	April 2, 2004	Prior Group:	2814

U.S. PATENT DOCUMENTS						
Examiner Initial*	Document Number	Issue Date	Name	Class	Sub Class	Filing Date If Appropriate
	5,747,361	05/1998	Ouellet			
	5,801,427	09/1998	Shiratake et al.			
	5,907,188	05/1999	Nakajima et al.			
	5,936,306	08/1999	Jeng			
	5,962,904	10/1999	Hu			
	6,091,120	07/2000	Yeom et al.			
	6,147,388	11/2000	Ma et al.			
	6,162,715	12/2000	Mak et al.			
	6,208,004	03/2001	Cunningham			
	6,236,093	05/2001	Hiura			
	6,284,635	09/2001	Jang			
	6,346,438	02/2002	Yagishita et al.			

FOREIGN PATENT DOCUMENTS							
		Document Number	Publication Date	Country	Class	Sub Class	Translation Yes or No
		DE 2940200A1	03/1981	West Germany			

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
	M. Wittner, et al., "Oxidation Kinetics of TiN Thin Films," J. Appl. Phys., Vol. 52, pp. 6659-6664, November (1981)
	K. Matsuo, et al., "Reliable High-k TiO <sub>2</sub> Gate Insulator Formed by Ultrathin TiN Deposition and Low Temperature Oxidation," Extended Abstracts of the 1999 International Conference on Solid State Devices and Materials, pp. 164-165 (1999)

Examiner	Date Considered
*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	
Form PTO 1449	Patent and Trademark Office - U.S. Department of Commerce